FACE-RECO-EIGENFACES – README

Instructions to Run the File(s) :

1. First extract the zip file.

2. You can see every file submitted that I have submitted in a folder.

3. For running the code file(s), double tap on the file directly to run it, or you can use a code editor to run it as well. At last, the window/screen won't get close automatically. You will have to press 'Enter' key to close the window after the program has been successfully executed. You'll get that instruction in execution.

4. The code uses following imports, so make sure you have them : matplotlib, scipy, numpy, cv2, os.

5. When the code is almost done, the results will be printed, and you can scroll up and down to see the results on the terminal window.

Instructions for Modifying the Dataset :

- If you modify the dataset to test on another one, you will have to update all necessary changes in the code.
- For example, paths of the images, number of input images, range of the images, identity index of each person in an image for both training and test images, etc.

Abstract :

- The algorithm used is described in the paper attached in the announcement on google-classroom. Alternatively, here is the link to that paper. The algorithm uses Eigen-Faces approach to perform face recognition.

- The dataset used to evaluate the model is CalTech dataset, as said in the queries doc attached in the announcement on google-classroom. Alternatively, here is the link to that dataset in tar format.

- I manually segregated Train and Test datasets from the original CalTech Face dataset. I have randomly and evenly (uniform distribution) picked the test samples from original dataset.